Amendments to the Claims

1-124. (Canceled)

125. (Currently Amended) A structural, stainless steel alloy compr sing, in combination, by weight: about 0.15 to 0.30% carbon (C), about ~~6~~ 8 to ~~18~~ 17% cobalt (Co), ~~at least~~ about ~~2.5 of~~ 2.0 to 5% nickel (Ni), about 8.0 to 11.0% chromium (Cr), about 1.0 to 3.0% m olybdenum (Mo), less than about 0.8% vanadium (V), and less than about 3% tungsten (W), the balance essentially iron (Fe) and incidental elements and impurities, characterized in that the alloy ha: a predominantly lath martensite microstructure essentially without topologically close packed int rmetallic phases and said carbon (C) predominantly is in a dispersion of nanoscale, ~~predominantly~~ M_2C carbide particles having a nominal dimension less than about ten (10) nanometers in diamet r, where M is two or more elements selected from the group consisting of Cr, Mo, W, V, Nb and Ta.

126. (Previously Presented) The alloy of claim 125 wherein M con prises Cr and Mo.

127. (Previously Presented) The alloy of claim 125 wherein M comp romises Cr. Mo and V.

128. (Previously Presented) The alloy of claim 125 wherein M con prises Mo and one or more elements selected from a group consisting of W, V, Nb and Ta.

129. (Previously Presented) The alloy of claim 125, wherein the al oy is processed to an M_2C carbide particle strengthened ultimate tensile strength greater than abou t 260 ksi.

130. (Previously Presented) The alloy of claim 125 processed to a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is the yield strength.

131. (Previously Presented) The alloy of claim 125 processed to a t nsile strength greater than about 260 ksi and a toughness to strength ratio strength ratio (K_{IC}/YS) e qual to or greater than

about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is yield strength.

132. (Previously Presented) The alloy of claim 125 wherein cementite (Fe_3C) dissolution is effectively complete.

133. (Currently Amended) A structural stainless steel alloy comprising in combination by weight: about 0.15 to 0.3% carbon (C); about ~~6~~ 8 to ~~18~~ 17% cobalt (Co); ~~at least~~ about 2.0% ~~2.5%~~ to 5% nickel (Ni); about 8 to 11% chromium (Cr); ~~molybdenum (Mo), tungsten (W) and vanadium (V),~~ molybdenum (Mo) ~~being~~ present in an amount by weight greater than about 1.0 and less than about 3%, ~~the~~ tungsten (W) ~~being~~ present in an amount by weight less than about a 3% and ~~the~~ vanadium (V) ~~being~~ present in an amount by weight less than about 0.8%; the balance essentially iron (Fe) and incidental elements and impurities characterized in that the steel alloy comprises a corrosion resistant, lath martensitic microstructure essentially without topologically close packed intermetallic phases and ~~including~~ said carbon (C) predominantly in a dispersion of nanoscale, ~~predominantly~~ M_2C carbide particles having a nominal diameter of about ten (10) nanometers or less where M comprises ~~Mo~~ Cr and one or more elements selected from the group consisting of ~~Cr~~ Mo, W and V and wherein cementite ~~(Fe_3C)~~ dissolution is effectively complete.

134. (Previously Presented) The alloy of claim 133 processed to an ultimate tensile strength greater than about 260 ksi.

135. (Previously Presented) The alloy of claim 133 processed to a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is the yield strength.

136. (Previously Presented) The alloy of claim 133 processed to a tensile strength greater than about 260 ksi and a toughness to strength ratio (K_{IC}/YS) equal to or greater than about 0.21 $\sqrt{in}$

where K_{IC} is the plane strain fracture toughness and YS is yield strength.

137. (Previously Presented) The alloy of claim 133 wherein M comprises Cr, Mo and V.

138. (Currently Amended) A structural stainless steel alloy comprising in combination by weight: about 0.15 to 0.30% carbon (C); about ~~6~~ 8 to ~~18~~ 17% cobalt (Co), about 2.0% ~~2.5%~~ to 5% nickel (Ni), about 8.0 to 11.0% chromium (Cr), about 1.0 to 3.0% molybdenum (Mo), less than about 0.8% vanadium (V), and less than about 3% tungsten (W), the balance essentially iron (Fe) and incidental elements and impurities, characterized in that the alloy has a predominently lath martensite microstructure essentially without topologically close packed intermetallic phases and said carbon (C) is predominantly in a dispersion of nanoscale, ~~predominantly~~ M_2C carbide particles having a nominal dimension less than about ten (10) nanometers in diameter, where M is two or more elements selected from the group consisting of Cr, Mo, W and V.

139. (Previously Presented) The alloy of claim 138 wherein M comprises Cr, Mo, W and V.

140. (Previously Presented) The alloy of claim 138 wherein the alloy is processed to an ultimate tensile strength greater than about 260 ksi.

141. (Currently Amended) The alloy of claim 138 processed to a toughness to strength ratio ~~K_{IC} is the plane strain fracture toughness and YS is the yield strength (K_{IC} / YS)~~ equal to or greater than about $.021\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is the yield strength.

142. (Currently Amended) The alloy of claim 138 processed to a tensile strength greater than about 260 ksi and a toughness to strength ratio (K_{IC}/YS) equal to or greater than about $0.21\sqrt{in}$ where K_{IC} is the plane strain fracture toughness and YS is yield strength.

143. (New) The alloy of claim 132 wherein the M_2C carbide accounts for at least about 85% of the carbon (C) content of the alloy.

144. (New) The alloy of claim 138 wherein the M_2C carbide accounts for at least about 85% of the carbon (C) content of the alloy.

145. (New) The alloy of claim 125 wherein at least one of said elements selected from the group consisting of Mo, W and V is included to effect the formation of M_2C carbide particles.

146. (New) The alloy of claim 133 wherein at least one of said elements selected from the group consisting of Mo, W and V is included to effect the formation of M_2C carbide particles.

147. (New) The alloy of claim 138 wherein at least one of said elements selected from the group consisting of Mo, W and V is included to effect the formation of M_2C carbide particles.